RPS920000077US1 PATENT

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: : Before the Examiner:

Roger Kenneth Abrams : Truong, Thanhnga B.

Serial No.: 09/708,397 : Group Art Unit: 2135

**:** 

Title: SYSTEM AND METHOD : IBM Corporation

FOR PREVENTION OF : IP Law Dept. YXSA/Bldg. 002

BUFFER OVERFLOW : 3039 Cornwallis Road

INTRUSIONS : P.O. Box 12195

: Research Triangle Park, NC 27709

# AMENDMENT UNDER 37 C.F.R. §1.312

Mail Stop Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Filing Date: November 8, 2000

Dear Sir:

In response to the Notice of Allowance and Issue Fee Due mailed on August 24, 2007, the above-identified Application has been carefully reviewed before payment of the Issue Fee. This is a request that the following amendment be entered under the provisions of 37 C.F.R. §1.312.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 4 of this paper.

RPS920000077US1 PATENT

## IN THE CLAIMS

Please cancel claims 1-17 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### **Listing of Claims:**

Claims 1-17 (cancelled)

Claim 18 (original) A method for handling buffer overflow attacks against an application program running on a data processing system, having a CPU and a RAM divided into pages, the method comprising the steps of:

designating an execution flag for each page of RAM allocated to a stack of the application program;

permitting CPU execution of data on pages of RAM according to the execution flag;

determining whether the application program is susceptible to buffer overflow attacks; and

if the application program is susceptible to buffer overflow attacks, setting the execution flag as to the pages of RAM allocated to the stack of the application program.

Claim 19 (original) The method of claim 18 wherein step of permitting CPU execution comprises the steps of:

examining the execution flag on the page of RAM; if the execution flag is set, triggering a hardware interrupt; and otherwise executing the data on the page.

Claim 20 (original) The method of claim 18 further comprising the steps of: establishing a process structure table;

maintaining the process structure table by annotating within the process structure table the susceptibility of the application program to buffer overflow attacks,

RPS920000077US1 PATENT

wherein the step of determining susceptibility to buffer overflow attacks is made with reference to the process structure table.

Claim 21 (original) The method of claim 19 further comprising the steps of:

establishing a process structure table;

maintaining the process structure table by annotating within the process structure table the susceptibility of the application program to buffer overflow attacks,

wherein the step of determining susceptibility to buffer overflow attacks is made with reference to the process structure table.

Claim 22 (original) The method according to claim 20 wherein the step of maintaining the process structure table is done once at the beginning of execution of the application program, and

the step of determining susceptibility is performed upon each receipt of a request to allocate an additional page of RAM for the application program code.

Claim 23 (original) The method according to claim 21 wherein the step of maintaining the process structure table is done once at the beginning of execution of the application program, and

the step of determining susceptibility is performed upon each receipt of a request to allocate an additional page of RAM for the application program code.

Claim 24 (original) The method according to claim 22 wherein request to allocate an additional page of RAM is a request to allocate the additional page of RAM for the stack.

Claim 25 (original) The method according to claim 23 wherein request to allocate an additional page of RAM is a request to allocate the additional page of RAM for the stack.

## **REMARKS**

Claims 1-25 were pending. Applicant cancelled claims 1-17 without prejudice or disclaimer. Hence, claims 18-25 are pending. Applicant cancelled claims 1-17 so as to place all method claims (claims 18-25) in one issued patent. Applicant will be filing a continuation patent application with cancelled claims 1-17 once this amendment has been entered.

As Applicant presently has not yet made payment of the Issue Fee and no new matter is added by this Amendment, it is respectfully submitted that the foregoing amendment is proper subject matter for this Section 312 Amendment.

The Commissioner is hereby authorized to charge any insufficiency of payment of the necessary fees associated with this communication, or credit any overpayment, to Deposit Account No. <u>50-0563</u> in the name of <u>International Business Machines Corporation</u>.

Applicant respectfully requests that the Examiner call Applicant's attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining issues.

Respectfully submitted,

WINSTEAD P.C.

Attorneys for Applicant

Robert A. Voigt, Jr.

Reg. No. 47,159

P.O. Box 50784 Dallas, TX 75201 (512) 370-2832 Austin\_1 511851v.1